



MATERIAL SAFETY DATA SHEET
COMPLIES WITH 29 CFR 1910.1200.
OSHA HAZARD COMMUNICATION RULE

DATE OF LAST REVISION: 05-29-02

CHEMICAL IDENTITY

LABEL IDENTITY	INDIUM
CHEMICAL NAME/SYNONYMS	INDIUM
FORMULA	In
CHEMICAL FAMILY	ELEMENT
CAS REGISTRY NUMBER	7740-74-6, Listed on the TSCA Inventory.
HAZARDOUS INGREDIENTS	INDIUM
%: 100	TLV: 0.1 mg/m3 OSHA/PEL: 0.1 mg/m3

PHYSICAL AND CHEMICAL PROPERTIES

COLOR, FORM AND ODOR	Odorless, Soft, silvery-white metal
BOILING POINT	2080° C (3776° F)
DENSITY (gm/cc)	NA
VAPOR PRESSURE @ 20°	NA
% VOLATILE BY VOLUME (%)	NA
REACTION WITH WATER	NA
EVAPORATION RATE (H2O=1)	NA
SOLUBILITY IN WATER	Insoluble
MELTING POINT	156.7° C (314° F)

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	NE
AUTOIGNITION TEMPERATURE (°C)	NE
FLAMMABILITY	Non-flammable
EXTINGUISHING MEDIA	Use extinguishers appropriate for the surrounding conditions
SPECIAL FIRE FIGHTING PROCEDURES	Wear a self-contained breathing apparatus
UNUSUAL FIRE & EXPLOSION HAZARDS	Moderate fire hazard in the form of dust



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HEALTH HAZARD INFORMATION

HMIS RATING:

HEALTH: **nd** FLAMMABILITY: **nd** REACTIVITY: **nd** PERSONAL PROTECTION: **nd**

ROUTES OF ENTRY

INHALATION: **Yes**
SKIN: **Yes**
INGESTION: **Yes**
EYE: **Yes**

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: **No Data**

POTENTIAL HEALTH EFFECTS:

INHALATION: Inhalation of fume or dust may cause local irritation to the respiratory system. Inhalation of fume or dust may cause headache, nausea, abdominal pain, fatigue and pain in the legs, arms and joints. Inhalation can cause shortness of breath and sore throat.

INGESTION: Ingestion of dust may cause headache, nausea, abdominal pain, fatigue and pain in the legs, arms and joints.

SKIN CONTACT: Normal handling should not cause any adverse health effects. May cause mild skin irritation. Hot molten metal may cause burns to the skin. Wear protective equipment when handling molten metal.

CHRONIC: Indium may cause damage to respiratory system. Kidney and liver damage from injection of indium compounds has been reported based on limited animal testing.

CARCINOGENICITY: No NTP: No IARC MONOGRAPHS: No OSHA REGULATE: No

EMERGENCY FIRST AID PROCEDURES:

INGESTION: If patient is conscious, ONLY induce vomiting as directed by trained personnel. NEVER give anything by mouth to an unconscious person. Seek medical attention immediately.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration or oxygen by trained personnel. Seek immediate medical attention.

SKIN CONTACT: Remove contaminated clothing. Wash affected area with soap and water. Wash clothing before reuse. If irritation persists, obtain medical attention.

EYE CONTACT: Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation persists.



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REACTIVITY DATA

STABILITY	Stable
CONDITIONS CONTRIBUTING TO UNSTABILITY	None known
INCOMPATIBILITY (MATERIALS TO AVOID)	Avoid contact with acids, sulfur or oxidizing agents. Ignites and incandesces on heating with sulfur.
HAZARDOUS DECOMPOSITION PRODUCTS	Harmful organic fumes and toxic oxide fumes may form at elevated temperatures.
HAZARDOUS POLYMERIZATION CONDITIONS TO AVOID	Will Not Occur
	NE

SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Contain spill. If molten, cool to allow metal to solidify. If solid metal wear gloves, pick up and return to process. If dust, wear recommended personal protective equipment. DO NOT SWEEP. Use a vacuum, place in barrels and return to process if possible.

WASTE DISPOSAL METHOD:

Scrap metal alloy usually has value. Contact a commercial reclaimer for recycling. Otherwise, dispose of in accordance with all Federal, State and Local environmental regulations.

SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE:

Only dry metals should be added to molten bath. If working with molten metal, or exposed to fume or dust, use appropriate personal protective equipment. Always thoroughly wash your hands after handling this product. DO NOT touch or rub eyes until hands are washed. Store product in a cool, dry area away from incompatible materials.



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TRANSPORTATION REQUIREMENTS

Transport in accordance with applicable regulations and requirements. Not regulated under US DOT (United States Department of Transportation)

THE ABOVE INFORMATION IS ACCURATE TO THE BEST OF OUR KNOWLEDGE. HOWEVER, SINCE DATA, SAFETY STANDARDS AND GOVERNMENT REGULATIONS ARE SUBJECT TO CHANGE THE CONDITIONS OF HANDLING AND USE, OR MISUSE ARE BEYOND OUR CONTROL, **ANGSTROM SCIENCES** MAKE NO WARRANTY, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND DISCLAIMS ALL LIABILITY FOR THE RELIANCE THEREON. USER SHOULD SATISFY HIMSELF THAT HE HAS ALL CURRENT DATA RELEVANT TO HIS PARTICULAR USE.

NA= NOT APPLICABLE

ND= NO DATA FOUND

NE=NOT ESTABLISHED